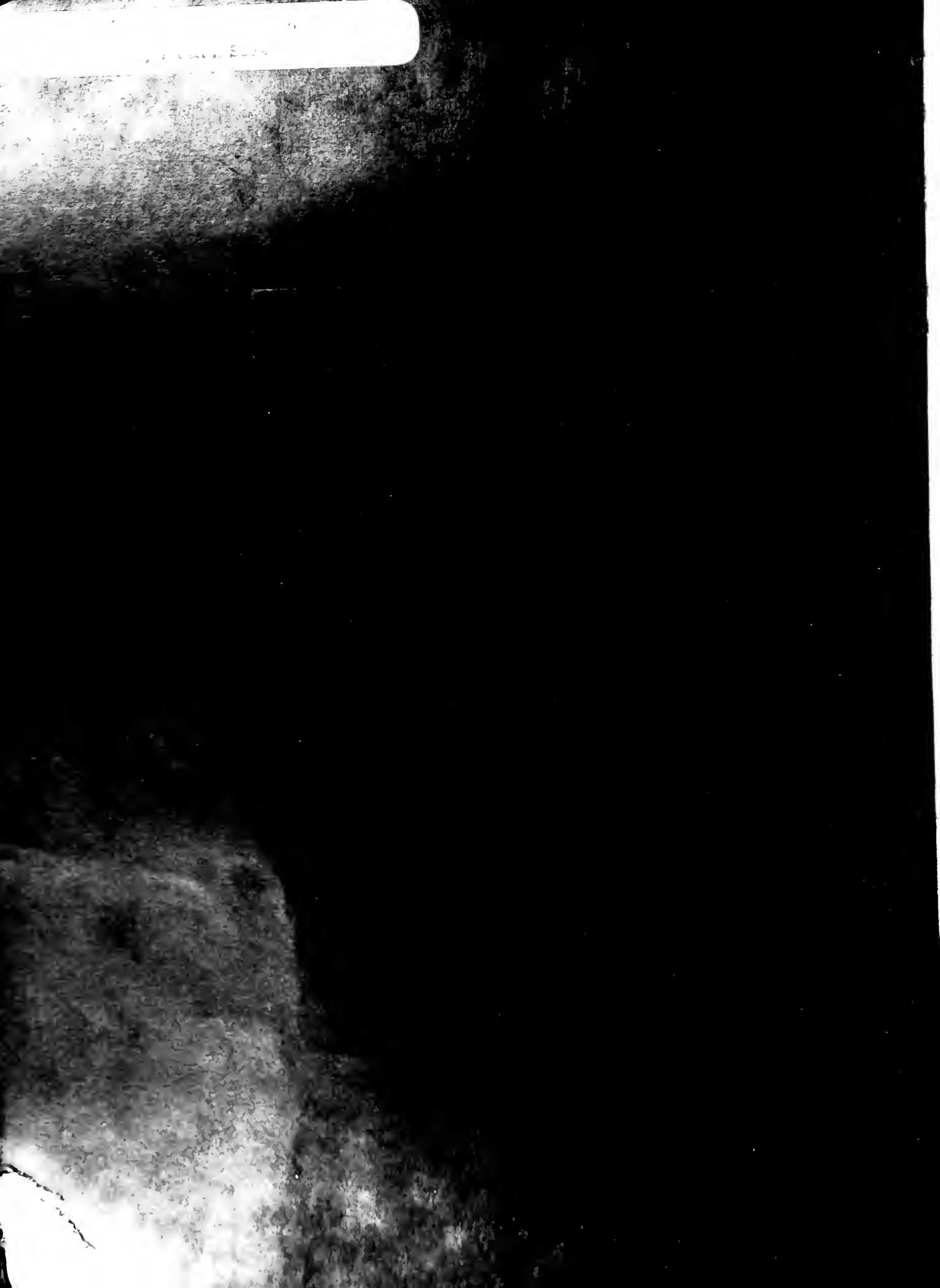
THE DEFENSE SUPPLY AGENCY
OF INTEGRATED MATERIEL MANAGEMENT

by

Harry Hodges Arnold



THE DEFENSE SUPPLY AGENCY: A STUDY OF INTEGRATED MATERIEL MANAGEMENT

by

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INTRODUCTION

> One of the most productive fields for the economic application of centralized management is in the provision of common supplies and related services to all the Military Departments.
>
> After a rather comprehensive study of this entire problem, we came to the conclusion that considerable economy and efficiency could be gained if all the common supply management activities were consolidated into a single agency. Accordingly, a new Defense Supply Agency was established and placed directly under the Secretary of Defense.
>
> The new organization has a big job ahead of it. I am sure that it will encounter some difficulties during its first year of operation, but I am equally confident that in the long run it will improve supply support to the operating forces while materially reducing the cost to the taxpayer.[1]

So spoke Secretary of Defense Robert S. McNamara in 1961, shortly after announcing an unprecedented undertaking, the establishment of an agency, independent of the military services, responsible for the provision of common supply and service support to the military services.

The events which led to the establishment of the Defense Supply Agency (DSA) may be viewed as a slow evolutionary process, fraught with controversy at every step of the way. The

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[1]Robert S. McNamara, quoted in U.S., Defense Supply Agency, An Introduction to the Defense Supply Agency, (Washington, D.C.: Government Printing Office, 1962), p. v.

principal proponents of the "single-agency" concept, among whom were influential members of Congress and the prestigious Hoover Commission, argued against the duplication, overlapping of functions and waste inherent in the proliferation of military supply systems dealing with supplies commonly used by two or more services. The opponents of integrated materiel management, while recognizing the need for improvement, argued that integration under the "single-agency" concept was an unsatisfactory trade-off of individual military service authority and control for the sake of economy. Or viewed in another way, it was considered to be a trade-off of effectiveness for efficiency, a price that the military services were unwilling to pay.

After seven years of operation with DSA, there is no longer any serious speculation concerning the possibility that the responsibility for management of common supplies and services will again be decentralized to the military services. Integrated materiel management in some form is here to stay. The question now is how has DSA met the challenge presented in its charter, i.e. "providing the most effective and economical support of common supplies and services to the military departments and other DOD components."[1]

The purpose of this study, then, is to examine the role of DSA as the principal integrated materiel manager for the

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[1]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22, November 6, 1961.

Department of Defense and how the challenge of "providing the most effective and economical support" has been met. The approach will include a review of events which led to the establishment of DSA in order to understand the climate in which integrated materiel management evolved. An examination will be made of the requisites for effective integrated materiel management to determine how DSA has met these requisites. Of primary interest will be the experience of DSA during the Vietnam War, for this has certainly provided the greatest test to date of DSA's ability to meet the challenge. An analysis of DSA's approach to integrated materiel management will be undertaken to determine its strengths, weaknesses and potential. From this, implications for the future will be derived.

CHAPTER I

TRENDS TOWARD INTEGRATED MATERIEL MANAGEMENT SINCE WORLD WAR II

Background

Although the concept of integrated materiel management as we know it today did not develop until after World War II, the question of how best to provide the military services with common supplies and services was seriously discussed as far back as World War I. A suggestion to Bernard Baruch, Chairman of the War Industries Board, that a single agency be established to purchase all military supplies, was rejected on the ground that there were many overriding advantages in the decentralized systems then in use.[1]

In the intervening period between the two wars, there was almost continuous congressional interest in the subject of management of common supplies and services. Many bills aimed at consolidation of military logistics functions were introduced in the Congress. Proposals to consolidate the procurement function were integral parts of all these bills. However, major proposals were successively rejected by congressional committees and the military departments, primarily on the ground that they were not

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[1]U.S., Department of Defense, Integrated Management of Common Supply Activities, Report of the Study Committee, July 11, 1961, p. I 1.

in the best interest of the nation.

With the advent of World War II, military supply became "big business." The impact on the nation's economy was unprecedented. As a result, the Congress focused increased attention on the duplication and inefficiencies of the separate military supply systems. Illustrative of the thinking within the Congress which emphasized the need for improved methods to eliminate duplication and waste, was the testimony of Representative Wadsworth of New York before the Woodrum committee, during hearings in 1944 on a proposal to establish a single Department of Armed Forces:

> . . . let's take a look at what we call our postwar period. Let us estimate some of the elements which will be influential in swaying the judgement, rightly or wrongly, of the people and the Congress of that day. When this war is over it may be that we shall have run up a national debt approaching $300,000,000.
> . . . Already we visualize other financial obligations or commitments. . . . And do not forget that while these expenditures are going on, the taxpayers, millions of them, crying for some measure of relief, may turn desperately to find a place where big slashes can be achieved. It is more than probable that their attention will be riveted upon the military services and that the cry will go up all over the country that there aren't going to be any more wars; that we do not need more than a flimsy skeleton of a national defense structure.
> That's what happened in 1920. That is what happened after every war in which we have engaged. I do not need to remind you of the cruel, bitter price which our country has paid in lives and treasure as a result of that sort of performance back through the years. In all seriousness I say to the men in responsible command in all our military services that they must look ahead and be prepared to justify before the Congress and the people of that day the maintenance of adequate military forces. And in preparing the services against that day they must cooperate one with the other in every conceivable effort in the reduction of expenditures to wipe out all unnecessary duplication,

> to eliminate waste . . . the solutions which we recommend may well be inadequate unless the services themselves join hands, one with the other, and help us. By so doing you may contribute the greatest measure of assistance to us in our work. But more important still, you may erect a sound and understandable defense against those traditional postwar tendencies to which I have referred. Do not forget what happened in the past.[1]

National Security Act of 1947

Although many proposals were made and many bills were introduced prior to and during World War II to consolidate military logistics functions, the first significant legislation with respect to such consolidation was the National Security Act of 1947. Even so, this was a small first step. This act, which provided the basic framework for the current Department of Defense organization by the creation of the National Military Establishment, did not provide for a separate common supply agency, as had been previously suggested.

However, of primary significance was the explicit assignment of responsibility to the Secretary of Defense for positive action to eliminate duplication and waste in military logistics management:

> . . . the Secretary of Defense shall take appropriate steps to eliminate unnecessary duplication or overlapping in the fields of procurement, supply, transportation, storage, health and research.[2]

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[1] U.S., Congress, Senate, Committee on Military Affairs, Department of Armed Forces, Department of Military Security, Hearings, 79th Cong., 1st sess., 1945, p. 698.

[2] National Security Act of 1947, Public Law 80-253, 80th Cong., 61 Stat. 495, sec. 202(a)(3), 1947.

The National Security Act of 1947 established the Munitions Board as a staff agency of the Office of the Secretary of Defense and gave it statutory authority for coordinating the logistic efforts of the military departments. However, it is important to recognize that the Munitions Board was not delegated any decision-making authority. Rather, its duties consisted primarily of making recommendations to the Secretary of Defense for his approval and implementation. A further limitation on the effectiveness of the Munitions Board was that much of its detailed work had to be conducted on a committee basis because it had to rely on the use of existing operating units in the three military departments.[1]

While the National Security Act of 1947 laid the groundwork for future integration of common supply functions, little discernible progress was made in that direction in the years immediately following passage of the act. In attempting to understand the reason for this lack of progress, it is necessary to understand the concept under which the National Military Establishment came into being:

> . . . The concept of this first unification law was federation, not merger, of the armed forces. It created a federated agency, unique in the executive branch, entitled the National Military Establishment. This Establishment was not itself an executive department but consisted mainly of three separate executive departments--the Departments of the Army, the Navy, and the

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[1]U.S., Department of Defense, Integrated Management of Common Supply Activities, p. I 2.

> Air Force. Each department retained all powers not expressly delegated by the unification law to the Secretary of Defense. The civilian heads of the departments, although subordinate in certain respects to the Defense Secretary, retained the statutory right of direct access to the Director of the Budget and the President. The head of the National Military Establishment, entitled "Secretary of Defense," was given four specific duties which were so worded in the law as to limit his role to that of a coordinator--more of a supervisor than administrator. These duties were, first, to establish general policies and programs; second, to exercise general direction, authority, and control; third, to eliminate unnecessary duplication and overlapping in certain specific fields; and, fourth, to exercise certain budgetary authority over the departments and agencies of the National Military Establishment. The law gave the President and the Secretary of Defense direction over the Joint Chiefs of Staff, and gave the Secretary of Defense direction over the boards and agencies of the Military Establishment.[1]

Under this concept of federation or unification by coordination, little progress toward integration of logistics functions could be expected and little progress materialized.

First Hoover Commission Recommendations

The Committee on Organization of the Executive Branch of the Government, commonly known as the first Hoover Commission, recognized the inadequacy of defense organization under the National Security Act and made certain recommendations to correct the deficiencies. The 1949 amendments to the National Security Act of 1947 met the criticisms of the first Hoover Commission by creation of the Department of Defense as an executive department and by increasing the authority of the Secretary of Defense,

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[1]U.S., Congress, House, Committee on Armed Services, Unification and Strategy, H. Doc. 600, 81st Cong., 2d sess., 1950, pp. 1-2.

making him the principal assistant to the President on national defense.

> The concept of this new law, as contrasted to the federation concept of the original Unification Act, was one of centralized, clearly defined civilian authority in one executive department. The loosely joined system of three executive departments, each with direct access to the President, was discarded. The new law changed the synonym of unification from "coordination" of the armed forces to "centralization" under the Secretary of Defense.[1]

Another integrating influence which resulted from the first Hoover Commission report was the establishment of the General Services Administration under the Federal Property and Administrative Services Act of 1949. The administrator was delegated broad authority to assume supply responsibilities for all federal agencies, including the military services. However, the potential impact of this provision was, to a large extent, nullified by another provision of the act which gave the Secretary of Defense authority to exempt the National Military Establishment from such action by the General Services Administration.[2]

O'Mahoney Amendment

Disclosures of supply inadequacies by the Bonner subcommittee of the House Government Operations Committee in 1961 caused the Deputy Secretary of Defense to direct the Munitions

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[1] Ibid., p. 3.

[2] Federal Property and Administrative Services Act of 1949, Public Law 81-152, 81st Cong., sec. 201(a), 1949, p. 9.

Board to set up a supply systems study project for each category of materiel. "Priority consideration" was to be given to "the feasibility of assigning to a single military department the responsibility for procurement, distribution, including depot storage and issue for classes of common items of supply and equipment and depot maintenance of such equipment." Since the Bonner subcommittee had pointed out that the Army and Navy each had five medical supply depots in the United States, the Secretary of Defense directed that a feasibility test be undertaken at Alameda, California, to determine if the Army could satisfactorily distribute medical supplies in that area to the Navy. This feasibility test came to be known as the Alameda Medical Test.[1]

Further disclosures by the Bonner subcommittee that the Air Force was building a separate supply system for common use items resulted in the O'Mahoney Amendment to the Department of Defense Appropriations Act of 1953. This amendment required the Secretary of Defense to issue mandatory regulations to the military services with respect to procurement, production, warehousing and distribution of supplies and equipment.[2]

The apparent intent of the following provision of the O'Mahoney amendment was to ensure secretarial review of the existing military supply systems with a view toward eliminating

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[1]U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 86th Cong., 2d sess., 1960, p. 38.

[2]Ibid., p. 39.

duplication and overlap of functions, thereby facilitating the establishment of an integrated supply system:

> Notwithstanding any other provision of law, and for the purpose of achieving an efficient, economical, and practical operation of an integrated supply system designed to meet the needs of the military departments without duplicating or overlapping of either operations or functions, no officer or agency in or under the Department of Defense, after the effective date of this section, shall obligate any funds for procurement, production, warehousing, distribution of supplies or equipment or related supply management functions, except in accordance with regulations issued by the Secretary of Defense.[1]

The action taken by the Secretary of Defense to implement the O'Mahoney amendment, while probably meeting the letter of the law, did not appear to comply with congressional intent:

> The main consequence of the O'Mahoney amendment was the issuance of directives by the Secretary of Defense restating or reaffirming existing regulations under which the military departments, agencies, and offices obligated funds for the varied supply activities within their cognizance.[2]

Reorganization Plan Number 6

In 1953, President Eisenhower established the Rockefeller Committee to study defense organization. As a result of committee recommendations, Defense Department Reorganization Plan Number 6 abolished the Munitions Board and transferred its functions to the Secretary of Defense. The reorganization plan

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[1] Department of Defense Appropriations Act for 1953, Public Law 82-488, 82d Cong., 66 Stat. 538, sec. 638, 1952.

[2] U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, H. Rept. 2440, 87th Cong., 2d sess., 1962, p. 10.

authorized the establishment of six new Assistant Secretaries of Defense, including the Assistant Secretary of Defense (Supply and Logistics).[1]

The Munitions Board, which had been responsible, among other things, for the Defense Standardization Program, the Military Cataloging Program, and for coordinating defense procurement, had made little progress in integrating defense materiel management.

> The Munitions Board, comprising representatives of the three military services and a chairman with limited discretion, never became an effective agency for military supply integration.[2]

The Assistant Secretary of Defense (Supply and Logistics) notified the military departments in November, 1953 that the supply systems study project undertaken by the Munitions Board was discontinued and that subsequent emphasis was to be placed on supply management improvement "within the respective services." The Alameda Medical Test was discontinued in accordance with this pronouncement.[3]

Thus, the emphasis shifted away from integrated materiel management and away from congressional intent as prescribed by the O'Mahoney amendment. This shift occurred in

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[1]U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 86th Cong., 2d sess., 1960, p. 39.

[2]U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, H. Rept. 2440, p. 9.

[3]U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 86th Cong., 2d sess., 1960, p. 39.

spite of the fact that the report on the Alameda Medical Test, which had been submitted to the Munitions Board in October, 1952, had concluded that this limited approach to integrated materiel management had been proven feasible and that economies could be achieved through such integration by the elimination of duplicated administrative and overhead costs.[1]

Second Hoover Commission Recommendations

The second Hoover Commission report, issued in 1955, strongly criticized the waste and duplication in military supply systems and focused renewed attention to the lack of progress toward integration of materiel management. The Commission recommended that Congress enact legislation establishing a separate civilian-managed agency, reporting to the Secretary of Defense, to administer common supply and service activities.[2] It was further recommended that the agency be named the Defense Supply and Service Administration.[3]

There was unanimous opposition by the military services and the Department of Defense to these Hoover Commission

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Management, H. Rept. 857, 83rd Cong., 1st sess., p. 37.

[2]U.S., Committee on Organization of the Executive Branch of the Government, Business Organization of the Department of Defense, (Washington, D.C.: Government Printing Office, 1955), p. 45.

[3]Ibid., p. 50.

recommendations. The following are typical of the arguments cited in opposition to the proposal:

> 1. The objectives of the Hoover Commission give inadequate consideration to the mission and organization of the armed services; overemphasizes peacetime conditions; and assumes a lack of efficiency in military logistic activities.
> 2. Deficiencies in the area of common-supply and common-service activities have been recognized by the Department of Defense and actions have been taken to correct them.
> 3. The establishment of the agency would lead to duplications in both overhead and operating personnel, since two supply organizations would be required, one for common items and the other for military peculiar items. Moreover, civilians would be hired to perform work now being accomplished by troops on practical application training assignments and destined for duty in the combat zone in wartime.
> 4. The expandability of a common supply and service agency in time of war would be much less rapid than that of the armed services, since it would not have access to personnel through the draft, does not have reserve units available to it, and would perhaps be subject to loss of men to the draft.
> 5. Retention of civilians in wartime on military supply and service jobs is doubtful, particularly under the threat of nuclear war.
> 6. Military effectiveness would be jeopardized because supply would become less responsive to command.[1]

The Single Manager Plan

As a result of the Hoover Commission's recommendations and continuing criticism by members of Congress concerning failure to comply with the intent of the O'Mahoney amendment, the Secretary of Defense established the single manager concept in

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[1]U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 86th Cong., 2d sess., 1960, pp. 16-17.

November, 1955. This concept, under which one military service was given supply support responsibility for a particular commodity or service to meet the requirements of all the military services, constituted a reversal of the previously announced defense position which questioned the value of unification along single manager lines.

The single manager plan, which incorporated many of the concepts envisioned under the Hoover Commission's recommendations, appears to have been essentially a compromise measure designed to maintain military control of supply systems and to prevent the formulation of the highly controversial "fourth service of supply." The compromise aspects of the plan were, perhaps, best summed up by the House Committee on Government Operations, which postulated that:

> It balanced Congressional and Hoover Commission demands for more integrated supply operations against the preference of the military departments for separate supply organizations and the prevailing military doctrine that each department must control its own supply channels for effective performance of military missions.[1]

Under the single manager plan, military departmental secretaries were designated as single managers and were assigned total responsibility for the funding, procurement, inventory management, storage, maintenance and distribution of all wholesale

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Management, Single Manager Agencies, Hearings, 86th Cong., 1st sess., 1959, p. 11.

stocks of commodities as assigned by the Secretary of Defense. The departmental secretaries, in turn, established single manager operating agencies to discharge their inventory management responsibilities. The user military services maintained control over requirements determination and retail distribution.

Initially, four single manager assignments were made in what were, perhaps, the most obvious areas of commonality, i.e., subsistence, clothing and textiles, medical materiel and petroleum products.

Logistics System Study Project

In 1957, the Secretary of Defense ordered a critical appraisal of all the principal arrangements for coordinating the military supply and logistics systems in order "to develop the ultimate plan of supply system organization." The findings of the Logistics System Study Project, issued in 1958, indicated that the single manager plans constituted effective supply management techniques. Although this study project was discontinued before completing the development of the ultimate plan of logistics organization, it was primarily responsible for the establishment of the Armed Forces Supply Support Council and the Armed Forces Supply Support Center in 1958.[1]

The Armed Forces Supply Support Center, a jointly

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[1]U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 86th Cong., 2d sess., 1960, pp. 101-3.

staffed activity, was responsible to the Secretary of Defense through the Armed Forces Supply Support Council, which was composed of the Deputy Assistant Secretary of Defense, (Supply and Logistics) as chairman, a principal military representative appointed by each of the four services, and the Director of the Armed Forces Supply Support Center. The following functions were assigned to the center, as stated in its charter:

> (a) Prepare and publish Federal catalog data and insure conversion to the data by the military supply systems.
> (b) Recommend the assignment of responsibility among the services for the monitorship and development of specifications for certain categories of supplies.
> (c) Develop and coordinate interservice operations to assure cross-utilization of assets in order to minimize procurement, stockage, and transportation.
> (d) Conduct specific study projects of the operations of supply systems of the military services and noncommercial common items of material to obtain optimum integration in the interest of increased military effectiveness and economy.[1]

McCormack Amendment

Notwithstanding the progress that had been made toward the integration of military logistics functions, in 1958, congressional pressures for greater unification and greater economies resulted in passage of the McCormack-Curtis Amendment to the Defense Reorganization Act of that year. The language of this amendment removed any lingering doubts with respect to the authority of the Secretary of Defense to integrate supply and

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[1] Ibid., p. 103.

service functions.

> Whenever the Secretary of Defense determines it will be advantageous to the government in terms of effectiveness, economy, or efficiency, he shall provide for the carrying out of any supply or service activity common to more than one military department by a single agency or such other organizational entities as he deems appropriate.[1]

Defense Materiel Management Improvement Program

With the pressure still on for greater integration in the field of common supplies and services, in 1959 the Defense Materiel Management Improvement Program was initiated. This program, which consisted of a series of study projects participated in by all the military services under the direction of the Assistant Secretary of Defense (Installations and Logistics), was undertaken for the purpose of achieving further integration of materiel management "without disruption of the military supply systems."[2]

In 1959 and 1960, as a result of studies by the Armed Forces Supply Support Center, four new commodity single manager assignments were made at the direction of the Armed Forces Supply Support Center. The new commodity areas so assigned were industrial, construction, automotive and general supplies.[3]

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[1] National Security Act of 1947, as amended, sec. 202(c)(6), 5 USC 171a(c)(6).

[2] U.S., Department of Defense, Integrated Management of Common Supply Activities, p. I 4.

[3] Ibid.

As we shall see in Chapter III, the most significant event in this evolutionary process was the establishment of the Defense Supply Agency in 1961. The purpose of this chapter has been to review the principle forces and events which contributed to the evolution of integrated materiel management within the Department of Defense prior to the study project which resulted in the creation of the Defense Supply Agency. Space does not permit discussion here of all integrating influences. However, several important programs, including those involving cataloging, standardization, and interservice utilization of assets, without which little progress could have been made toward integration, will be discussed in later chapters.

The above review tends to cast the Congress into a continuing role of advocate of ever increasing integration of materiel management and the military services into a role of opposition to such progress, the net result of which was slow progress toward integration. The notion of deliberate foot-dragging by the Defense Department is exemplified by the following extract from a study prepared by members of the staff of the Joint Economic Committee:

> Various facets of supply management in Department of Defense have been subjected to numerous studies since the passage of the National Security Act in 1947. Careful and objective studies are very useful and necessary, but they should not be used as a substitute for forthright and effective action. The record, however, appears to indicate that studies have often been utilized in Department of Defense solely for the

purpose of postponing decisions.[1]

There can be little doubt that opposition within the military services to the concept of integrated materiel management was due, in part, to such factors as the natural reluctance to change, the desire for retention of the status quo and parochial fears of any proposals which would tend to "crumble existing empires." However, lest we be too quick to criticize, it must be remembered that there was, and still is, genuine concern over the possible detrimental effects on combat readiness which might result from the establishment of a civilian-controlled "fourth service of supply." Therefore, any proposal which bore the earmarks of a "fourth service" was automatically opposed. It must also be remembered that time tends to erase environmental influences. An objective analysis must recognize that there were fundamental communications, identification and management barriers which inhibited more rapid progress toward consolidation and integration of logistics functions. As data processing technology advanced and new management and information techniques were developed, these fundamental barriers began to disappear, thereby paving the way for genuine progress toward greater integration of materiel management.

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[1]U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 86th Cong., 2d sess., 1960, p. 106.

CHAPTER II

REQUISITES FOR EFFECTIVE INTEGRATED MATERIEL MANAGEMENT

In order to provide a framework within which the Defense Supply Agency's approach to integrated materiel management may be discussed, this chapter sets forth certain requisites for effective integrated materiel management. This is not intended to be an all-inclusive discussion. Rather, it is intended to focus attention on the more important requisites for the attainment of maximum efficiency and effectiveness.

Materiel Management Defined

Materiel management is that phase of military logistics which includes managing, cataloging, requirements determination, procurement, distribution, overhaul and disposal of materiel. The term materiel management is considered to be interchangeable with the terms supply management and inventory control.[1]

Tenets of Integrated Materiel Management

In an attempt to identify and isolate the tenets of integrated materiel management, a search of the available

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[1]U.S., Joint Chiefs of Staff, Dictionary of the United States Military for Joint Usage, JCS Publication Number 1, 1964, p. 96.

literature nowhere reveals so cogent a summation as that provided by Captain Theodore B. Purvis, Jr., U.S. Navy:

> Sound management requires weighing cost against effectiveness. Trading off effectiveness and cost applies not only to weapons systems, but to support services and collateral functions as well.
>
> Effectiveness in an integrated supply system requires:
>
> 1. Specialization of personnel and equipment in commodity management, procurement, distribution, and technical services;
> 2. Uniform procedures and terminology among and between the Military Services to facilitate transmission and interpretation of information;
> 3. A distribution system that minimizes delivery time to the ultimate user;
> 4. Item standardization to promote interchangeability, eliminate unnecessary duplication, and optimize asset utilization;
> 5. Availability of assets to all users, with recognition given to program and time priorities;
> 6. Streamlined disposal procedures to eliminate unnecessary items, optimizing space utilization and management resources.
>
> Economy in an integrated supply system requires:
>
> 1. Elimination of duplication in functions between various levels to the greatest extent practicable;
> 2. A streamlined distribution system to minimize intransit inventories, stock layering, and materials handling;
> 3. Sound methods for requirements determination, based on complete and timely data;
> 4. Efficient procurement based on sound requirements.[1]

Direction and Control of Integrated Management

An integrated manager has an unusually complex task

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[1]Theodore B. Purvis, Jr., "The Role of the Defense Supply Agency in the Support of Military Programs and Weapons Systems" (unpublished thesis, Industrial College of the Armed Forces, 1964), pp. 11-12.

since he must be responsive to the needs of all the military departments. Under the concept of integrated materiel management, individual military services are necessarily divested of the authority and responsibility for management of supplies and services assigned to the integrated manager. This creates an anomalous situation in that military commanders are responsible for military operations and mission accomplishment, yet, they have no direct control over a large portion of the resources required to assure mission accomplishment.

If the integrated manager is to be responsive to the diverse needs of the military services, top management attention must be given to the integrated support system in order to ensure that the integrated manager has the necessary resources and the necessary policy guidance to carry out his task.

This suggests the requirement for a short direct chain of command between the Secretary of Defense and the integrated manager. However, there is no use pretending that a shortening of the chain of command by itself produces significantly different results than some other organizational scheme. The integrated manager must still work closely with all levels of the military departments to avoid arbitrary or unilateral decisions which would be detrimental to effective supply support for one or more military departments. In addition, the integrated manager must work closely with the joint staff of the Joint Chiefs of Staff to ensure that supply support is in consonance with military planning. However, the short chain of command is important

because a large number of significant decisions must be brought to the attention of the highest level of the Department of Defense and decided on a uniform, rational and coherent basis.[1]

Identification of Items Susceptible of Integrated Management

It is necessary to have effective criteria and uniform procedures for identification and assignment of susceptible "common" supply items to an integrated materiel manager.

The first question which arises is, what are common supplies? Technically speaking, common supplies are identical items which are used by two or more services. Generally, the only practical way to determine whether two items are identical is by use of the Federal Stock Number, i.e., if the items have the same stock number, they are identical.

Early in the history of integrated materiel management, it was recognized that the potential benefits of integrated management were not limited to those items which were "common" in the strict sense of having identical stock numbers. Accordingly, the term "common-use" items came into being when the single manager plan was conceived. "Common-use" items were defined as "a class or category of items, of commercial type, largely non-technical in nature, generally used throughout the military and civilian economies." The concept of "common-use"

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[1]U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, H. Rept. 2440, pp. 80-81.

items under this definition is, perhaps, best understood by the use of an example. Army, Navy, Air Force and Marine Corps uniforms are distinctly different from each other. However, they are considered to be "common-use" items because they are items of clothing. Clothing is a class or category of items of commercial type, largely non-technical in nature, generally used throughout the military and civilian economies.[1]

The "common-use" approach to assignment of items to integrated management was adequate for the relatively simple commodities involved in the four initial single manager assignments: subsistence, clothing and textiles, medical supplies, and petroleum products. These four assignments were made on the basis of entire Federal Supply Groups and Classes, without screening individual items in each class. However, as more technical items such as industrial, automotive, construction and general supplies were considered for assignment to integrated management, it became apparent that there were some items in these classes which, for various sound reasons, must be retained for management by the individual services. Since the "common-use" approach had become too restrictive, it was necessary to devise criteria against which all items in the classes under consideration could be screened.[2]

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[1]Andrew T. McNamara, "The Defense Supply Agency" (unpublished document, December 12, 1961), p. 27.

[2]Ibid., pp. 27-28.

To meet this need, Item Management Coding (IMC) criteria were developed. These criteria permit screening by the military services of all Federally stock numbered items in classes assigned to the Defense Supply Agency for integrated management. Items within the assigned classes which meet the exception criteria may be retained for management by the services. Among the most significant exception criteria are:

Major end items of equipment of unusual importance to operating units; certain categories of repairable items; items requiring approval for issue on a case-by-case basis because of design or engineering considerations; items unstable in design; items which require source control restrictions; non-commercial weapon systems consumables not covered by adequate specifications; items of special importance to the performance of military missions.[1]

The item management coding concept, under which the criteria are susceptible to change in accordance with the changing requirements of the military services, appears to afford the services adequate flexibility in retention of items from classes assigned to integrated management, thereby providing an acceptable framework for making integrated management assignments.

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[1]U.S., Department of Defense, Item Management Coding Manual, DOD 4140.26-M, July 1, 1965, pp. I 1-II 11.

Preservation of the Integrity of Military Departmental Logistics Organizations and Capabilities

> Logistical control must never be separated from the responsibility of the combat commander.[1]

The Project 100 Study was established by Secretary of Defense McNamara in 1961 for the express purpose of providing "the proper long-term blueprint for managing common supply and service activities."[2] The decision to establish the Defense Supply Agency resulted from the report of the Project 100 Study Committee. The committee, chaired by then General Counsel of the Department of Defense Cyrus R. Vance and composed of the four logistic assistant secretaries, endorsed five principles which they felt should be observed in planning further integration of common supply management. These principles appear to be equally as valid today and for the future as they were when enunciated in 1961:

> 1. Integrated supply management systems must be suitable for wartime use without substantial change, and must be fully responsive to combat needs of the operating forces.
> 2. Each Service must retain full control over the development and management of assigned weapon systems. The process of selecting items to be managed by Single Managers must be based upon criteria which permit the Military Departments to retain under their own management those items which are of critical importance to the operation of assigned weapon systems.

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[1] Ibid.

[2] U.S., Department of Defense, "Integrated Management of Common Supply and Service Activities," memorandum from Robert S. McNamara, Secretary of Defense, March 23, 1961.

3. Each Military Service will continue to require military personnel trained in supply and service management to meet CONUS [Continental United States] retail and user requirements, overseas and mobilization requirements, and the logistic support of that Service's assigned weapon systems.

4. The ownership and control of wholesale stocks by Single Managers should continue to be restricted to CONUS, unless otherwise directed by the Secretary of Defense. This requires that the Services continue to provide and maintain their own retail and overseas distribution systems.

5. There needs to be a clear delineation between the functions assigned to integrated managers and those assigned to the military services.[1]

The Project 100 Committee also recognized the direct applicability of certain principles previously enunciated by the logistic chiefs of the four military services.[2] Several are pertinent to the maintenance of the integrity of military departmental logistics capabilities.

The first of these principles is that each military service must retain the authority and capability for requirements determination. The integrated manager should be responsible for computing requirements to meet system demand and should determine net procurement requirements for all items under his management. The rationale behind this principle is that requirements

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[1]U.S., Department of Defense, Integrated Management of Common Supply Activities, pp. III 4-III 5.

[2]Interservice Agreement on Principles and Functional Assignments in the Area of Common Supplies and Services, reprinted as Appendix D to U.S. Department of Defense, Integrated Management of Common Supply Activities.

determination consists of determining those factors or programs on which computation may be based as well as such item determinations as may be involved in developing outfitting and allowance lists and specific mobilization reserves.

Secondly, each military service must maintain its own operationally sensitive distribution system sufficient to provide tailored combat support. Since each service discharges its assigned missions in essentially different combat postures, these distribution systems must be oriented toward the peculiar operational requirements of each service.

Finally, the military services must retain the prerogative of selecting for service management those items of supply which the individual service considers it must manage to carry out its assigned mission. This is in keeping with the principle that mission responsibility cannot be separated from control over the vital means necessary to the accomplishment of that mission.[1]

Optimizing Responsiveness to Military Requirements While Minimizing Costs

The term responsiveness, as used here, is defined as effective and timely support to the military services. No attempt will be made to establish or define the optimum level

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[1]Above, pp. 24-26.

of supply effectiveness, for there is no single optimum level for all commodities or for all circumstances. Even a comparison of supply effectiveness of an integrated manager with that of service managed items is of dubious value, for the supply-demand basis on which most common, high turnover items are managed makes the integrated manager's task far different and much less difficult than the management of more technical materiel remaining under service control.[1] However, it is noted that the supply effectiveness rates of each of the single manager operating agencies had reached or exceeded 95 per cent prior to the time these agencies were taken over by the Defense Supply Agency.[2] It would, therefore, seem that the integrated manager should emphasize maintenance of these previously established levels in order to prevent degradation of the supply support posture.

Turning to the question of timely response, as contrasted with supply effectiveness or stock availability, there is a clear need for the integrated manager to be able to deliver materiel to the military end-user in time to meet his requirements. During the single manager era, it became obvious that the absence of standardized requisitioning, issue and priority systems was jeopardizing the ability of the single manager operating agencies to support the other military services in a timely manner.

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[1]Oscar N. Dale, "Integrated Materiel Management Yesterday, Today and Tomorrow" (unpublished thesis, Industrial College of the Armed Forces, 1967), p. 91.

[2]U.S., Department of Defense, Integrated Management of Common Supply Activities, p. II 3.

Furthermore the dissimilar systems and documentation of the services were impeding the progress of mechanization and automation.[1]

As a result of these difficulties, the Department of Defense developed and implemented the Military Standard Requisitioning and Issue Procedures (MILSTRIP) and the Uniform Movement and Materiel Issue Priority System (UMMIPS) in 1962. As their names imply, these systems provide uniform procedures for the requisitioning and issue of materiel throughout the Defense Department and a standard method of designating the priority of a requisition, based on military essentiality. In addition, UMMIPS provides standard time frames for the issue and shipment of materiel, based on assigned priorities.

These standardized procedures provide the framework for timely response by the integrated manager. To assure timely support within this framework, there is a clear need for a streamlined, efficient wholesale distribution system.

How, then, can integrated materiel management minimize costs while maximizing responsiveness to military requirements. Deputy Secretary of Defense Roswell Gilpatric answered this question by enumerating the following list of cost reduction benefits expected to result from the creation of the Defense Supply Agency:

> Greater efficiency through uniform direction and control.

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[1] Ibid., p. III 2.

> Uniform implementation of policies of the Secretary of Defense concerning management of common supplies.
>
> Reduction of workload for requisitioners, inventory managers, and supply points through standardized procedures, systems, and organization.
>
> Increased supply responsiveness and reduced warehousing and transportation costs through streamlined and consolidated distribution.
>
> An increase in the rate of standardization of items.
>
> Greater economies and faster adjustments to change through a reduction in decision making time because of the elimination of multiple channels and layers of management.
>
> Greater flexibility and simplification in programing, budgeting, and funding, through the consolidation of resources.
>
> Reduced overlapping and duplication through consolidation of common facilities and functions, thereby reducing overhead costs.
>
> Improved utilization of total assets in the Department of Defense with corresponding reductions in inventory investments.
>
> Better merchandising in the disposal of surplus personal property.
>
> Continuation of the increased utilization of the General Services Administration by the Department of Defense, and increased uniformity in such utilization.[1]

The Distribution System

As has already been suggested, the integrated manager's distribution system is a key element in assuring timely response to military service requirements. The distribution system plays an even more important role in assuring increased efficiency of operation.

With respect to efficiency of operation it is considered

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[1]U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, Hearings, before a subcommittee of the Committee on Government Operations, House of Representatives, 87th Cong., 2d sess., 1962, p. 66.

that the objective of the wholesale distribution system is to minimize cross-hauling and back-hauling and to position stocks to best advantage close to areas of military concentration and ports of embarkation.[1]

However, this is a difficult objective to reach. It requires a careful study of all customer activities and raises a multitude of questions. Who are the customers? Where are they located? What are thir missions? What is their volume of consumption of the various commodities? What are the transportation alternatives? The answere to these and a myriad of other difficult questions must be found in order to construct the optimally efficient distribution system.

Although the single manager approach to integrated materiel management resulted in a significant increase in overall efficiency of operation,[2] the single manager distribution systems left much to be desired. Even though the single managers attempted to arrange warehousing and distribution patterns to meet the needs of all defense customers in the most economical manner, there was a natural tendency to build these systems on the existing facilities of the individual bureaus or technical

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[1]This was the objective of the Defense Supply Agency when establishing its wholesale distribution system; see U.S., Congress, Joint Economic Committee, Background Material on Economy in Government-1967, 90th Cong., 1st sess., 1967, p. 153.

[2]As of December 31, 1960, annual savings at the rate of $20 million per year and one-time savings of over $500 million had been identified; see U.S., Department of Defense, Integrated Management of Common Supply Activities, p. II 3.

services of the parent military deparment. This resulted in the creation of a multiplicity of distribution systems for common supplies.[1]

With this experience in mind, it becomes obvious that the goal of truly efficient distribution systems can best be reached through the unity of command inherent in the single agency approach to integrated materiel management.

Procedural Uniformity

Procedural uniformity in such areas as requisitioning, billing, reimbursement, pricing, cataloging, provisioning, transportation and movement and other types of reporting and accounting procedures, is an obvious requisite of effective integrated materiel management. It is suggested that procedural uniformity can best be attained through the influence of the single agency integrated manager. Under the single manager approach, there was no real incentive to standardize procedures. As in the case of distribution systems, the single manager was motivated to utilize the procedures of his parent military department.[2]

The single agency integrated manager is the natural leader for the development and implementation of standardized

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[1] Ibid., p. III 4.

[2] As of the date of the Project 100 study report, sixteen different requisitioning and documentation systems had been identified throughout the Department of Defense; see U.S., Department of Defense, Integrated Management of Common Supply Activities, p. III 2.

procedures, for he is motivated to take maximum advantage of increased efficiency and effectiveness through automation. He cannot hope to accomplish this while dealing with a multiplicity of differing procedures.

Communications Routing Procedures

Ideally, military service customer activities should have a single point to which all requisitions submitted to integrated materiel managers may be addressed. Under this concept, the customer's task is greatly simplified.

However, this approach raises several basic questions. What are the consequences of interposition of an activity having only a communication function between the user and the responsible supply manager? A test of this concept during implementation of the DSA distribution system was not wholly conclusive. However, military service opposition arose because of the interposition of this extra link in the communications chain. The second basic question involves the role of the routing center. Should it be considered as purely a communications link with no supply management functions or should it perform supply related functions such as furnishing status information on requisitions or re-routing requisitions to depots in the event that one or more inventory control points is incapacitated under emergency or wartime conditions?[1]

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[1]U.S., Defense Supply Agency, Major Areas of Effort or Inquiry, Fiscal Year 1966, p. 15.

These and other related questions were under consideration for several years before the decision was made to implement the Defense Automatic Addressing System (DAAS) in 1968.

The decision was made in favor of a defense-wide system under the operational control of DSA. The computerized system, which utilizes the Defense Automatic Digital Network (AUTODIN), essentially provides a communications routing capability but has certain additional capabilities including the ability to reply to item source of supply interrogations from authorized activities.[1]

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[1]U.S., Department of Defense, Defense Automatic Addressing System, Draft Manual DOD 4140.29M, 1968, pp. 1 1-3 10.

CHAPTER III

ESTABLISHMENT OF THE DEFENSE SUPPLY AGENCY

By early 1961, eight commodity areas had been brought under the single manager plan. The single manager agencies for clothing and textiles, subsistence, medical and petroleum supplies were well established. Although the assignments for general, industrial, automotive and construction materiel had been made, the single manager agencies for these commodities were not yet fully operational. Under consideration for assignment to single management were electrical and electronic supplies and listed as possible future assignments were industrial production equipment, chemical supplies and aviation materiel.[1]

The single manager approach to integrated management of common supplies was gaining momentum, and it appeared to many observers that single manager assignments to the military departments constituted the blueprint for the future. Then, in 1961, the Armed Forces Supply Support Center issued a report on a study project undertaken in the previous year to recommend courses of action to provide for the optimum arrangement for management of electrical and electronics materiel within the

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[1]U.S., Department of Defense, Integrated Management of Common Supply Activities, Exhibit 1.

Defense Department. This report included the recommendation that the Secretary of Defense establish a Defense Electronics Management Center for the integrated materiel management of electrical and electronic equipment components and electrical wire and cable. The report further recommended that this be a joint center under the authority, direction and control of the Secretary of Defense, exercised through the Armed Forces Supply Support Council.[1]

Project 100

The newly appointed Secretary of Defense Robert McNamara, armed with the specific authorization of the McCormack amendment to adopt the most appropriate means of integration of supply and service activities,[2] faced the question of the future of integrated materiel management in an environment partially created by the controversial recommendation of the Armed Forces Supply Support Center. On March 23, 1961, some two months after taking the reins of the Defense Department, Secretary McNamara established Project 100 to determine the optimal approach. He stated that he considered "continued sound progress in the integration of common supply and service activities to be one of our primary means of achieving substantial improvement and economy in logistics management during the next four years."[3]

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[1] Ibid., p. I 4.

[2] Above, pp. 17-18.

[3] U.S., Department of Defense, "Integrated Management of Common Supply and Service Activities."

McNamara directed completion of the project by July 1, 1961 and limited the scope of the study by calling for three alternative plans of organization and management of common supply and service activities.

The study report was not to reach a final conclusion but was to include a comprehensive statement of the advantages and disadvantages of each of the three alternatives. The three plans specified for study were:

> Plan No. 1 - A plan based on continuation of the principle of assigning single manager responsibilities to the individual Military Departments. This plan will indicate how the Electronics Materiel Management Agency would best be established under one of the Military Departments, indicate possible future single manager assignments, and recommend desirable revisions in the present assignment, organization and operation of single managers.
>
> Plan No. 2 - A plan of organization and operation for a consolidated common supply and service agency to be assigned to the Secretary of one of the Military Departments. This plan should depict in depth the organization and method of staffing of such an Agency, its relationships with the Office of the Secretary of Defense, the headquarters of the Military Departments, the Bureaus, Technical Services and Commands, the Joint Chiefs of Staff, and the Unified and Specified Commands. It should also describe any changes in the status and mission of the Supply Corps, the Quartermaster Corps, and the Air Force Logistics Command which would result from this form of organization. The proposed Agency should include the Electronics Materiel Management Agency and the functions now assigned to the Armed Forces Supply Support Center.
>
> Plan No. 3 - This plan will present the same type and scope of organization as that outlined in Plan No. 2 but provide for its establishment as an Agency reporting to the Secretary of Defense. The report on Plan No. 3 should consider the advantages and disadvantages of having such an Agency report (1) through the Joint Chiefs of Staff (having the same status as the Defense Communications Agency) as one alternative, and (2) through another designee of the Secretary of

Defense, as a second alternative.[1]

Evaluation of the three plans was based on nine key criteria which the study committee felt should be applied in designing a long term blueprint for integrated materiel management:

1. Continued sound progress in integrated management.
2. Assure proper secretariel direction and control of integrated management.
3. Operation of the military logistics support system is a military function.
4. Obtain greater procedural uniformity.
5. Improve funding and accounting systems.
6. Strengthen and expand existing cataloging, standardization and utilization programs.
7. Make more effective use of common supply and service activities.
8. Establish more efficient distribution systems.
9. Preserve the integrity of departmental logistic organizations.[2]

The above criteria appear to have played an important role in the final decision by Secretary McNamara to establish the Defense Supply Agency. In discussing the rationale behind this decision, Deputy Secretary of Defense Roswell Gilpatric drew attention to the problems caused by lack of procedural uniformity among the single manager operating agencies. Other important problems which he associated with continuation and expansion of the single manager concept included the lack of

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[1] Ibid.

[2] U.S., Department of Defense, Integrated Management of Common Supply Activities, pp. III 1-III 5.

flexibility in the use of funds, inability to ascertain true operating costs, and duplication and overlap which was inherent in the separate distribution systems of the single manager operating agencies.[1]

The decision to establish the Defense Supply Agency was based on the belief that the progress made during the single manager era could best be improved upon through uniform procedures, improved distribution, more rapid standardization, better utilization of assets, and more efficient disposal operations, and that these objectives could best be attained by consolidating single manager activities in one cohesive, integrated agency under one head reporting directly to the Secretary of Defense.[2]

Accordingly, Secretary McNamara authorized the establishment of the Defense Supply Agency on September 12, 1961, some two months after he had received the report of the Project 100 Study Committee. The DSA charter[3] was issued on November 6, 1961 and the agency became operational on January 1, 1962.[4]

Mission and Responsibilities

The mission of DSA is to provide "the most effective

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[1]U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, Hearings, p. 59.

[2]Ibid., pp. 59-60.

[3]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22.

[4]U.S., Defense Supply Agency, An Introduction to the Defense Supply Agency, (Washington, D.C.: Government Printing Office, October, 1962), p. iii.

and economical support of common supplies and services to the military departments and other DOD components." This mission comprises two basic responsibilities. The first is the management, control, and distribution, at the wholesale level, of assigned materiel commodities and items of supply. The second is the administration and management of designated Department of Defense logistics services and programs.[1]

In order to accomplish this mission and to become operational at the earliest practicable date, DSA absorbed several "going concern" activities including the Armed Forces Supply Support Center, the eight existing single manager agencies, the Military Traffic Management Agency and two existing organizations concerned with disposal of surplus property.[2]

The scope of DSA's responsibilities at the time of the agency's establishment was described by the first DSA Director as follows:

> - Take over all the Supply Single Manager Operating Agencies, previously under the Secretaries of the Army and Navy.
> - Take over the Military Traffic Management Agency, previously under the Secretary of the Army;
> - Take over the Armed Forces Supply Support Center with responsibility for the Federal Catalog Program and its centralized cataloging operations, the Defense Standardization Program, the various programs for interservice utilization of assets, and the screening of excess.

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[1]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22.

[2]Ibid., Enclosure 1.

- Take over the thirty-four consolidated Surplus Sales Offices formerly operated by the three military departments;
- Take over the National Surplus Property Bidders Control Center;
- Administer the Surplus Property Disposal Program;
- Administer the Coordinated Procurement Program;
- Fund and operate its own distribution system;
- Take over the management of electrical and electronic supplies now managed separately by each of the military departments, creating an operating agency similar to the Single Manager Operating Agencies;
- Pursue studies to determine the feasibility of integrating the management of Industrial Production Equipment, Chemical Supplies, and Aeronautical Spare Parts; and
- Cause systems analysis and design to continue to improve integrated supply management.[1]

Relationships and Control

The Project 100 Committee considered and rejected the advisability of placing the Defense Supply Agency under the Joint Chiefs of Staff.[2] The Chairman, Joint Chiefs of Staff concurred in this view with an indication that the Joint Chiefs did not wish to become involved in supply policy matters.[3]

With respect to the adoption of the single agency alternative, the Project 100 Committee recommended the establishment of a Defense Supply Council composed of the Deputy Secretary of Defense as chairman, the secretaries of the three

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[1]Andrew T. McNamara, "The Defense Supply Agency," pp. 7-9.

[2]U.S., Department of Defense, Integrated Management of Common Supply Activities, p. VII 1.

[3]U.S., Joint Chiefs of Staff, "Integrated Management of Common Supply and Service Activities (DOD Project 100)," memorandum from General L. L. Lemnitzer, Chairman, Joint Chiefs of Staff, June 1, 1961.

military departments, and the Assistant Secretary of Defense (Installations and Logistics). Under this proposal, DSA would have reported to the Secretary of Defense through the Defense Supply Council, which would have been responsible for policy direction and guidance to DSA.[1] The Chairman, Joint Chiefs of Staff objected to this arrangement with an expression of concern that the proposed agency, responsible to this council, would not be as responsive to the operating forces as were the single manager agencies.[2]

Secretary McNamara rejected the proposal to place the Defense Supply Council in the chain of command and provided a direct chain of command from the Secretary of Defense to the Director, DSA. However, the Defense Supply Council was established to "advise and assist the Secretary of Defense in the direction and control of DSA." In addition to membership recommended by the Project 100 Committee, the Chairman, Joint Chiefs of Staff was assigned as a principal member of the council.[3]

As a practical matter, DSA is subject to the supervision of the various organizational elements of the Office of the Secretary of Defense which exercise policy direction and control on behalf of the Secretary. Since the Office of the

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[1]U.S., Department of Defense, Integrated Management of Common Supply Activities, p. VII 2.

[2]U.S., Joint Chiefs of Staff, "Integrated Management of Common Supply and Service Activities (DOD Project 100)."

[3]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22.

Assistant Secretary of Defense (Installations and Logistics) is the office of primary interest on the majority of DSA activities, the agency looks to that office, primarily, for policy guidance and assistance. In practice, there is a very close working relationship on policy matters between the office of the Assistant Secretary of Defense (Installations and Logistics) and Headquarters, DSA.[1]

In addition to the role of the Chairman, Joint Chiefs of Staff as a member of the Defense Supply Council, arrangements are in effect for regular coordination and review between DSA and the Joint Staff with respect to the peacetime, war and emergency plans, priorities and programs of the Joint Chiefs. DSA representatives are given periodic briefings by the Joint Staff on logistics implications of current strategic, tactical, contingency and emergency plans.[2]

There is extensive consultation and coordination between DSA and the military departments at both the headquarters and field levels. The DSA charter provides for "free and direct access to and communications with all elements of the DOD and other executive departments and agencies as necessary."[3]

It is DSA policy to avoid unilateral or arbitrary action in matters concerning effective supply support of the

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[1]U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, Hearings, p. 186.

[2]Ibid.

[3]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22.

military departments. The successful accomplishment of DSA's mission is dependent upon adequate information concerning developments within each of the military departments. DSA actively seeks the advice and assistance of the military departments in order to keep abreast of military requirements and changing support situations. Joint staffing of DSA is a key factor in maintaining close liaison with the military departments.[1]

With respect to internal relationships, the chain of command runs from the Director, DSA to the commander of each field activity. The management concept enunciated by the first Director of DSA, Lieutenant General Andrew T. McNamara, U. S. Army, provided for decentralization of operations and firm central control of the DSA entity as a whole:

> I want to follow the principle of decentralization of operations. I want to put as much responsibility and authority as I can in the hands of field commanders within their areas of interest. I want to spend as little time as possible on operational matters. I want to look to my field commanders for prompt decisions and results in the supply or service areas assigned to them. Through this kind of reliance on field commanders, I expect to be able to concentrate my efforts on overall direction, broad planning, and improved systems and operations. But I intend that DSA shall be one agency, not a loose federation of semi-autonomous separate activities. I intend to eliminate overlapping or duplication wherever I find it; to have uniformity in organization, procedures, and practices wherever it will increase our efficiency; and to exercise firm central control of DSA as a whole.[2]

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[1] U.S., Congress, House, Committee on Government Operations, Defense Supply Agency, Hearings, pp. 186-87.

[2] Andrew T. McNamara, "The Defense Supply Agency," p. 21.

Upon appointment of General McNamara, the Secretary of Defense established two primary objectives for DSA:

> First, to insure effective and timely support of the military services in time of mobilization, war, or other national emergency, as well as in peacetime; Second, to furnish this support at the lowest feasible cost.[1]

General McNamara later indicated that the order in which these objectives were established "is not accidental. It reflects the priority which governs all DSA programs. This priority and these objectives also govern the criteria against which DSA's achievements will be measured."[2]

Modification of the Logistics Environment

The establishment of DSA impacted heavily on the defense logistics environment. It consolidated within a single agency the services' wholesale logistics responsibilities involving common supplies. Each service, then, retained the responsibility for all other logistics functions involving these common supplies and all logistics functions relating to all other items. The military services retained retail logistics functions for all items as well as the responsibility for procurement and management of major end items and weapon peculiar items.[3]

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[1] U.S., Congress, Joint Economic Committee, Background Material on Economic Aspects of Military Procurement and Supply, 88th Cong., 1st sess., March 1963, p. 54.

[2] Ibid.

[3] R. Piekarz, The DSA and Military Logistics, (Santa Monica, California: The Rand Corporation, November 1962), p. 8.

Consequently, it was necessary to change the structure and relationships of military materiel support to establish a mechanism which permits effective interaction between the military services and DSA; to obtain an effective and efficient DSA management system; and to adjust service materiel support organization to the modified logistics environment.[1]

Since wholesale logistics activities are not ends in themselves, they must be performed in conjunction with activities of the user organizations. Wholesale inventories are procured and stored to meet demands over some time period. In order to stock the proper items in adequate quantities, the wholesale inventory manager must be informed of the consumers' decisions about the types and quantities of items they expect to use. Conversely, the performance of service logistics and military operations is partially dependent on the decisions of the wholesale inventory manager. For example, the performance of military equipment is partially dependent on the quality of the common supplies purchased by the wholesale agency. To assure items of satisfactory quality, the user organizations must communicate information to the wholesaler concerning the quality they desire.[2]

The establishment of DSA did not require a completely new logistics communications network and set of relationships

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[1] Ibid.

[2] Ibid., p. 9.

with the military services. Rather, DSA was able to build upon, restructure and standardize the network which had begun to take form under the single manager system.

CHAPTER IV

THE DEFENSE SUPPLY AGENCY: THE PRINCIPLE ORGANIZATION IN INTEGRATED MANAGEMENT

The Defense Supply Agency has grown, matured, and has become an effective member of the defense establishment. In January, 1962, DSA assumed management responsibility for some 87,000 items with an inventory value of more than 1.58 billion dollars. By the end of fiscal year 1968, the number of items centrally managed (excluding items designated for local purchase) approximated 1.72 million, with an inventory value of about 2.84 billion dollars.[1] Of interest in these statistics is the relatively small increase in the value of inventory. This is certainly one indicator of the efficiency inherent in the integrated materiel management concept. Table 1 illustrates certain selected key indicators of the growth of DSA.

How, then, have these savings in inventory investment been accomplished? During the period 1962 through 1965, DSA effected a net reduction of investment in inventory by issuing stocks in long supply without replacement. This can be viewed

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, before a subcommittee of the Committee on Government Operations, House of Representatives, 90th Cong., 2d sess., 1968, p. 316.

TABLE 1

INDICATORS OF DEFENSE SUPPLY AGENCY GROWTH

(Dollars in millions; Items in thousands)

	End January 1962	End Fiscal Year 1963	End Fiscal Year 1964	End Fiscal Year 1965	End Fiscal Year 1966	End Fiscal Year 1967	Dec. 31, 1967	End Fiscal Year 1968 (Plan)
Items centrally Managed...	87	1,029	1,328	1,369	1,335	1,538	1,710	1,729
Inventory.	$1,588	$2,412	$2,232	$1,977	$1,994	$2,896	$3,055	$2,843
Net Investment Change....	-$39.4	-$261.7	-$161.2	-$50.6	$1,322.5	$333.5		-$400
Procurement		$2,670	$2,701	$3,042	$5,740	$6,178	$2,604	5,103
Personnel[a]	9,500	25,970	31,141	34,128	53,554	59,604	58,649	57,139[b]

[a]Excludes temporary civilian personnel.
[b]June 30, 1968 allocation of full-time permanent civilian and military personnel.

Source: U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, before a subcommittee of the Committee on Government Operations, House of Representatives, 90th Cong., 2d sess., 1968, Figure 7, p. 316.

as a one-time savings since the long supply situations had been generated by the capitalization of wholesale stocks from the military services. In fiscal years 1966 and 1967, the net investment trend reversed as DSA built up the stock position to support the increased demand generated from the Vietnam War. The net investment reduction in fiscal year 1968 resulted from the leveling off of Southeast Asia demand, an improvement in industrial production capability and the drawdown of additional stock recently assigned to DSA for integrated management.[1]

The increase in personnel has proceeded in phase with the assumption of additional management responsibilities. The relatively large increase reflected in the fiscal year 1966 statistics primarily represents the assumption of contract administration service functions, the largest single addition to DSA's management task.[2]

Changes in DSA's Operation and Mission

The more significant activations and transfers of responsibilities to and from DSA and changes in DSA's mission assignment since its inception are indicated below:[3]

January 1, 1962--DSA assumed command of and redesignated Construction, Clothing and Textile, Subsistence and Traffic

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[1] Ibid.

[2] Ibid., pp. 316-17.

[3] U.S., Defense Supply Agency, "Chronology of the Defense Supply Agency," December, 1966.

Management Agencies from the Army; Medical and Petroleum Agencies from the Navy; Armed Forces Supply Center from the Department of Defense; and various disposal and surplus property offices from all the services.

April 1, 1962--DSA assumed command of Military Industrial Supply Agency from the Navy (redesignated as Defense Industrial Supply Center).

May 1, 1962--Army and Marine Corps clothing factories were transferred to DSA (under command of Defense Clothing and Textile Supply Center).

July 1, 1962--Defense Electronics Supply Center was established (new activity with assets capitalized from all services). DSA assumed command of Military Automotive Supply Center from Army (redesignated as Defense Automotive Supply Center).

August 15, 1962--Defense Surplus Bidders Control Office was disestablished. Functions were assumed by Defense Logistics Services Center (formerly Armed Forces Supply Support Center).

December 7, 1962--DSA Distribution System Plan was approved by the Secretary of Defense, with certain modifications.

January 1, 1963--DSA assumed command of Columbus Army Depot, Tracy Annex of Sharpe Army Depot and Naval Supply Depot, Mechanicsburg. (These transfers were in support of the DSA Distribution System plan.)

March 1, 1963--Defense Industrial Plant Equipment Center was established in Memphis, Tennessee (new activity).

September 28, 1963--DSA was designated as Department of Defense focal point to monitor all Department of Defense use of General Services Administration procurement and supply services.

November 1, 1963--DSA assumed command of Defense Documentation Center for Scientific and Technical Information from the Air Force.

January 1, 1964--Defense Automotive Supply Center was disestablished. DSA retained and transferred a portion of its mission to the Defense Construction Supply Center. The remainder of its mission was transferred to the Army.

January 1, 1964--DSA assumed command of Memphis Army Depot and Utah Army Depot. This completed the implementation of the DSA Distribution System.

March 1, 1964--Special Purchases Offices were established at Brooklyn, New York and Alameda, California to support Army overseas forces with DSA decentralized and non-catalogued items.

June 12, 1964--Department of Defense Standardization Program was transferred from DSA to the Office of the Assistant Secretary of Defense (Installations and Logistics).

September 1964 to December 1965--Eleven Defense Contract Administration Services Regions were established as primary level field activities of DSA. (Personnel and offices were transferred from all the services.)

February 15, 1965--Defense Traffic Management Service was transferred from DSA to the Army.

July 1, 1965--Defense Personnel Support Center was established at Philadelphia, Pennsylvania to replace the former Clothing, Subsistence and Medical Supply Centers, all disestablished during the month.

January 7, 1966--DSA Special Purchase Offices were disestablished. DSA supply centers assumed complete overseas support of decentralized and non-cataloged items for Army and Air Force (except for Air Force activities in Pacific area).

January 1, 1967--DSA supply centers assumed overseas support of decentralized and non-cataloged items for Air Force in the Pacific Area.

In addition to the above, there have been numerous transfers of management responsibility for categories of materiel to and from DSA, including several transfers from DSA to the General Services Administration. Other new mission assignments include the designation of DSA as focal point for supervision and coordination of modifications to certain newly implemented Department of Defense systems and procedures. These include Military Standard Requisition and Issue Procedures (MILSTRIP), Military Standard Transportation and Movement Procedures (MILSTAMP), Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP), and Military Standard Contract Administration Procedures (MILSCAP).[1]

Thus, to date, DSA has been a viable and extremely

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[1] Ibid.

flexible organization, taking on new management tasks, transferring some functions back to the military services and other defense components and changing organizational structure to accommodate changes in mission requirements and/or to increase efficiency of operations.

Of some interest are a number of new mission responsibilities such as the Defense Documentation Center and Defense Contract Administration Services which are not directly related to DSA's primary function, that of integrated materiel management. One can speculate that functions of this type were transferred to DSA as a matter of convenience or expediency. However, for whatever reason DSA was called upon to perform these unrelated functions, no further treatment will be given to them here, for they are beyond the scope of this paper.

Of great interest here is the one materiel management function performed by DSA which the writer considers to be inconsistent with the concept of integrated materiel management at the wholesale level. This is the responsibility which DSA has assumed for overseas support of decentralized and non-cataloged items for the Army and Air Force.[1] Notably absent from participation in this program is the Navy and Marine Corps.

This program, which is called SPUR, an acronym for special purchases, is essentially a procurement program, although it has certain supply management implications in that limited

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[1]Above, pp. 54-55.

stockage of some of these items is undertaken under established criteria after a certain number of requisitions are received for a given item. However, by the very nature of decentralized and non-cataloged items, the great majority of such items do not lend themselves to wholesale supply management concepts.

To illustrate this point, decentralized items are defined as "those items for which the cognizant ICP of a Military Department or the DSA has prescribed local management and procurement by bases, posts, camps and stations and other DOD activities, or fabrication by organizational and intermediate maintenance activities. . . ." Although this definition does not satisfactorily describe the criteria under which a management decision may be made to decentralize an item, the implication is that the criteria includes a combination of factors relating to the repairability of the item, the dollar value of the item and demand frequency.[1] The decentralization of an item connotes one or more characteristics including low dollar value, low demand frequency and commercial availability, normally on an "off the shelf" basis, or alternatively, relatively simple fabrication by maintenance activities.[2]

Non-cataloged items are defined as:

> . . . .items procured on a one-time basis for immediate consumption, items procured for research and

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[1]U.S., Department of Defense, Supply Management Review Program, Planning Report, October, 1965, pp. 67-68.

[2]U.S., Department of Defense, Supply Management Reference Book (Washington, D.C.: Government Printing Office, 1965), p. 98.

> development purposes, items obtained through oversea procurement and intended solely for oversea use, items procured with non-appropriated funds, items for which centralized supply system control is not feasible, and certain forms, charts, manuals or books.[1]

These items do not lend themselves to wholesale integrated materiel management concepts. For the most part, the requirements consist of low-dollar value one-time buys. Yet, DSA, which is organized for and oriented toward integrated management at the wholesale level has taken on this major responsibility.

To illustrate the magnitude of the program, during the most recent seven month period (July 1968 through January 1969) for which statistics are available, SPUR requirements accounted for 212,255 of a total of 613,991[2] DSA line item procurement awards or approximately 34 per cent of the total.[3]

The greatest impact of the SPUR program has been on the Defense Construction Supply Center (DCSC). For example, during this same seven month period, 83,607 of a total of 230,231 line item procurements awarded by DCSC were for SPUR requirements.[4]

The area of small purchases,[5] of which SPUR requirements

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[1] Ibid., p. 74.

[2] This total excludes procurements of fuel and subsistence items. These commodities are not involved in the SPUR program.

[3] U.S., Defense Supply Agency, Key Management Data, Procurement and Production Directorate, February 25, 1969, pp. 1-5.

[4] Ibid.

[5] The term small purchases is defined as purchases valued under $2,500.

account for a substantial portion, has been a particularly troublesome problem area at DGSC. This problem was highlighted by revelation of instances of gross overpricing by suppliers on small purchaes at DCSC by Congressman Pike, prior to and during congressional hearings on the subject in 1967. Subsequent investigation of the problem by DSA revealed that one of the primary causes of overpricing was the absence or inadequacy of descriptive data and item identification required to make determinations of price reasonableness or even to identify the basic characteristics of the items being procured.[1]

The subject of inadequate technical data deserves treatment in depth, but such treatment is beyond the scope of this paper. For these purposes, it is sufficient to have identified the problem and to have pointed out the direct relationship between difficulties due to inadequate technical data within DSA, the large volume of DSA's small purchase actions and DSA's responsibility for overseas support of non-cataloged and decentralized items, a mission which is incongruous with the basic mission of DSA.

The Current Structure of DSA

DSA has made considerable progress in terms of reducing and consolidating activities with a view toward improved efficiency in support of the military services. Among the more

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[1]U.S., Defense Supply Agency, Briefing Prepared for the Assistant Secretary of Defense (Installations and Logistics), 1967.

notable of these accomplishments is reduction of the number of Defense Supply Centers (inventory control points) by disestablishment of the Defense Medical Supply Center and the Defense Subsistence Supply Center and consolidation of the management functions for these commodities with clothing and textiles into the Defense Personnel Support Center in Philadelphia, Pennsylvania; consolidation of the former Army and Marine Corps clothing factories; reduction of the number of activities storing DSA managed materiel from seventy seven to twenty one; reduction of the number of consolidated surplus sales offices from thirty four to ten; and reduction of the number of subsistence regional headquarters from ten to eight.[1]

As a result of organizational adjustments such as these, the DSA field organization now consists of twenty five primary level field activities.[2] There are six Defense Supply Centers: Defense Personnel Support Center (DPSC), Philadelphia, Pennsylvania; Defense Fuel Supply Center (DFSC), Alexandria, Virginia; Defense Industrial Supply Center (DISC), Philadelphia, Pennsylvania; Defense Construction Supply Center (DCSC), Columbus, Ohio; Defense Electronics Supply Center (DESC), Dayton, Ohio; and Defense General Supply Center (DGSC), Richmond, Virginia.

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, p. 217.

[2]U.S., Defense Supply Agency, An Introduction to the Defense Supply Agency (Washington, D.C.: Government Printing Office, 1969), pp. 3-42.

The Defense Supply Centers, except DFSC which has a procurement responsibility only, operate as inventory control points and are responsible for materiel management of assigned commodities.

Four DSA activities are classified as Defense Depots. These are Defense Depot Mechanicsburg, Pennsylvania; Defense Depot Memphis, Tennessee; Defense Depot Ogden, Utah; and Defense Depot Tracy, California. In addition, four Defense Supply Centers, DCSC, DGSC, DPSC and DESC, perform depot functions. The Defense Depots are responsible for receipt, storage and issue of materiel as directed by the Defense Supply Center having materiel management responsibility for the items involved.

Four activities are categorized as service centers. These are Defense Logistics Services Center, Defense Industrial Plant Equipment Center, Defense Documentation Center and the DSA Administrative Support Center.

Finally, there are eleven Defense Contract Administration Services Regions (DCASRs) which provide such services to all requiring Department of Defense components, the National Aeronautical and Space Administration, other federal and state agencies and foreign governments.

DSA has continued support to the military services without interruption during periods of major organizational change. This has involved the extension of central control over a group of heterogeneous agencies and the development of uniform policy,

standards and procedures. Reorganization, consolidation of functions, closing of redundant activities, better utilization of facilities (including improved use of automatic data processing equipment), and other actions aimed at increased operating economies have reduced operating costs to the point that annual savings in the cost of operation of DSA are estimated at about 59 million dollars.[1]

Division of Responsibilities for DSA Managed Items

Under the principal that the user of military equipment and supplies should be responsible for the establishment of qualitative requirements, the military services have retained the responsibility for research, development, test and evaluation, specifications, standards, purchase descriptions, and qualitative requirements in general for items managed by DSA. It seems convenient then to establish a simple division of responsibility by the assertion that the services have the responsibility for the "technical" aspects of DSA materiel and that DSA has the "supply management" responsibility with all which that entails.

However, the simplicity of this division of responsibility is somewhat misleading. For example, DSA has certain "semi-technical" responsibilities under the Defense

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, p. 330.

Standardization Program.[1] The purpose of this program is to eliminate overlapping of items and reduce the number of sizes and kinds of items that are generally similar.[2]

Although DSA's authority to make standardization decisions on items for which it has management responsibility is based on the principal of coordination and prior agreement with user military services, the Director of DSA is authorized to make decisions where agreement cannot be reached, subject to the right of appeal to the office of the Secretary of Defense by the dissenting military departments. This policy concerning the authority for and enforcement of standardization decisions was made shortly after DSA was activated:

> In the exercise of its standardization authority with respect to items under its management, DSA will seek the views of the military departments and seek to obtain agreements among them, particularly with respect to questions in the technical-engineering area. However, if agreement cannot be reached, the Director of DSA will make the decision subject to

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[1]As of the end of fiscal year 1968, DSA had standardization management responsibility for approximately 2.4 million items, or some 62 per cent of the 3.9 million Department of Defense items in the Federal Supply System. As of that date, DSA had reviewed a total of 1,567,926 items with a view toward standardization. As a result, 508,078 items were deleted from the supply system; see U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, pp. 223, 320-21.

[2]U.S., Department of Defense, Standardization, Policies, Procedures and Instructions, Defense Standardization Manual 4120.3-M (Washington, D.C.: Government Printing Office, 1966), p. 111.

the right of appeal by the military departments to the Deputy Secretary of Defense.[1]

However, in view of the DSA policy to avoid unilateral or arbitrary action in matters concerning supply support of the military services, this question of DSA's authority to force the acceptance of standardization decisions becomes somewhat academic.[2] It is obvious that the real value of the standardization program lies in areas where agreement can be readily reached.

In addition to this standardization authority, DSA influences the updating and necessary changes to specifications for DSA managed materiel by review and referral of recommendations to responsible military service specification preparing activities. In this respect, the trend within the Department of Defense appears to be toward increased use of performance specifications rather than more detailed item specifications. Under this changing concept, DSA can be expected to play a larger "technical" role in interpreting and applying performance specifications, even though the specifications will continue to be determined by the user military services.[3]

DSA has a responsibility under its charter to "recommend research and development projects to the military departments to improve materials, items, and methods within the commodity

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[1]U.S., Department of Defense, "Defense Supply Council Meeting, February 7, 1962, 10 a.m.," memorandum from Roswell Gilpatric, Deputy Secretary of Defense, February 26, 1962.

[2]Above, p. 45-46.

[3]U.S., Defense Supply Agency, Major Areas of Effort or Inquiry, Fiscal Year 1966, pp. 8-10.

jurisdictions assigned, and to promote the elimination of undesirable duplication." In addition, the charter provides that DSA shall "recommend to the Director of Defense Research and Engineering any new or changed research and development projects considered desirable."[1]

Thus, in these and other programs such as the Federal Catalog System administered by the Defense Logistics Services Center, DSA performs functions which may be considered to be "semi-technical" in nature. However, it can be readily seen that these functions are, for the most part, advisory in nature and that DSA's principal "technical" role is one of influencing decisions by the military services.

The simplicity of the assertion that an even division exists in that DSA has the total "supply management" responsibility for items it manages is also misleading. If supply management is viewed as the continuum of events beginning with requirements determination and ending with distribution to the ultimate user,[2] it becomes evident that the military services are and must be responsible for the events at either end of the continuum. As pointed out in Chapter II, it is a generally recognized principal that each military service must retain the authority and responsibility for requirements determination based on military plans. Secondly, each military service must

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[1]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22.

[2]Above, p. 22.

maintain its own operationally sensitive distribution system sufficient to provide tailored combat support.[1]

The DSA materiel management task then is involved with the basic wholesale management functions, i.e., providing for necessary supply catalogs, computing the wholesale stock requirement to support the anticipated needs of all military service customers, initiating procurement action to fill stockage requirements, positioning stocks geographically in accordance with expected need, determining retention limits, initiating disposal action for excess quantities, and carrying out the financial management responsibilities associated with inventory management.[2]

Supply Management Strategies and the Requirements Process

In preparing the total Department of Defense requirements forecast for assigned items for purposes of procurement, maintenance, positioning, retention and disposal, DSA computes replenishment requirements based on past experience, modified through the use of appropriate requirements determination data furnished by the military services. This requirements data includes expected changes in program intensity, e.g., changes in troop strength, deployment, ration factors, flying hours and equipment density. In addition, the services furnish

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[1] Above, pp. 27-28.

[2] U.S., Department of Defense, Supply Management Reference Book, p. 55.

requirements forecasts in support of special one-time programs such as rebuild, construction, maneuvers and modifications.[1]

The selection of safety levels, required to provide each item managed with sufficient protection against an out of stock position, reflects not only past variability in demand but also the operational importance of the item to the user, tempered by the cost of obtaining the justifiable degree of protection. Selective management techniques are applied in such a way that the cost and importance of the item dictates the type and degree of management attention devoted to the item. Management actions on the relatively inexpensive and/or unimportant items are highly mechanized with little individual attention in order to permit concentration of management attention on the more important items.[2]

The role of DSA in direct support of service weapons systems, although confined to supplying of maintenance support items which are largely of the commercial type, has expanded to a level which requires considerable special management attention. The number of weapons systems receiving intensified management by DSA now totals twenty three and involves approximately 232,000 DSA items.[3]

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[1] Ibid.

[2] Ibid.

[3] U.S., Defense Supply Agency, An Introduction to the Defense Supply Agency (Washington, D.C.: Government Printing Office, 1969), p. 7.

DSA, which is oriented toward management by commodity, is not equipped to manage these items on a weapons systems basis.[1] Rather, the military services identify the weapons systems items to DSA and this information is integrated into basic management files as a priority indicator. These items are then given selective management attention through all phases of inventory management, procurement and distribution in an effort to assure continuous stockage and a "never out of stock" supply position.[2]

Conceptually, on the assumption that funding limitations do not restrict the establishment and use of optimum safety levels and the use of optimum economic order quantities, supply management strategies used by DSA afford obvious savings in both inventory investment and administrative costs associated with procurement, stockage and distribution of wholesale stocks of materiel, when compared to the costs associated with separate management by the individual services.

However, there is evidence that funding limitations have hampered DSA's ability to perform these functions at the optimum levels, particularly during the Vietnam War.[3] It is

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, p. 230.

[2]U.S., Department of Defense, Supply Management Reference Book, pp. 70-71.

[3]U.S., Defense Supply Agency, Memorandum for Record, "Summary of Actions Associated With the Military Services Clothing Shortages," March 7, 1967.

obvious that the short run savings resulting from funding restrictions which require reduction of safety levels and less than optimum buy quantities result in an overall increase in costs over the long run. The point being made here is not that integrated materiel management fails to produce overall savings when compared to management by the individual services. Rather, the point is that optimal savings cannot be realized if funding limitations prevent the use of the most efficient supply management strategies.

The DSA Distribution System and Its Relationship with Retail Systems

Among the first concerns of DSA after it became operational was development of an integrated distribution system of selected distribution installations for DSA managed materiel which would effectively and economically serve all military customers. The distribution system study was completed in April 1962 and approved for implementation in December of the same year. The system was designed with a view toward accomplishment of the following operational objectives:

(1) Centralized inventory control by commodity;
(2) Customer requisitions submitted to one central location for each commodity where the requisition would be edited against system-wide asset availability;
(3) Supply information provided to the customer from one point only for each DSA commodity;
(4) Maximum use of automatic data processing equipment;
(5) Minimum storage installations strategically located throughout the United States to provide effective and economical support of all DSA customers; and

(6) Be capable of rapid expansion, if required, in an emergency.[1]

The DSA distribution system consists of seven principal depots and four specialized support depots, geographically located throughout the continental United States as follows:

Principal Depots:

Defense Construction Supply Center, Columbus, Ohio.

Defense Depot, Mechanicsburg, Pennsylvania.

Defense Depot, Tracy, California.

Defense Depot, Ogden, Utah.

Defense Depot, Memphis, Tennessee.

Defense General Supply Center, Richmond, Virginia.

Atlanta Army Depot, Forest Park, Georgia.

Specialized Support Depots:

Defense Electronics Supply Center, Dayton, Ohio.

Defense Personnel Support Center, Philadelphia, Pennsylvania.

Naval Supply Center, Norfolk, Virginia.

Naval Supply Center, Oakland, California.

The principal depots are responsible for the receipt, storage, stock readiness, inventory and issue of DSA managed items, including general mobilization reserve stocks, for the support of specified geographic areas, activities and military forces. The specialized support depots perform functions similar

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[1]U.S., Department of Defense, Supply Management Reference Book, p. 34.

to those of the principal depots, except that their missions are specialized as to type of materiel or scope of support responsibilities. The two Navy operated specialized support depots constitute a unique arrangement in that they support the fleet, Navy overseas activities and selected Navy activities within a twenty five mile radius of each. In addition, they support all military service requirements in emergency situations when such support is not available elsewhere in the DSA system.[1]

The DSA distribution system also includes ten direct supply support depots, under military service management, which have been established in support of large volume users, such as Navy shipyards, repair facilities and recruit training centers. The supply mission for DSA materiel at these locations is restricted to the stocking of Federal Supply Group 95 (metals, bars and shapes) and clothing for recruit training centers.[2]

The inventory control function and requisitioning procedures are centralized by commodity in each of the five Defense Supply Centers having a supply management responsibility.[3] After requisitions are received and processed by the Defense Supply Centers they are routed to the appropriate depot for issue

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, pp. 317-19.

[2]Ibid., p. 319.

[3]Above, p. 61.

of the materiel.

Although the DSA distribution system was designed to meet the needs of military customers in the most efficient and effective manner, several interface problems with the military service retail systems still remain. Principal among these problem areas are the lack of a clear line of demarcation between wholesale and retail inventories, and support of overseas forces with centrally managed DSA materiel.[1]

DSA's commodity management mission is confined by its charter to the wholesale level within the continental United States.[2]

The line of demarcation between wholesale and retail systems is relatively clear, with some exceptions, in the case of the Army and Air Force. This relationship with the Navy, however is by no means clear. As a general rule, Navy wholesale and retail inventories are merged in coastal supply centers, depots and industrial facilities. Establishment of a separately controlled DSA wholesale level as a source of replenishment for Navy wholesale/retail supply points would require a significant increase in aggregate defense inventory investment. The dilemma is this. To leave all tidewater inventories of DSA materiel under Navy ownership and control would leave a substantial

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[1]U.S., Defense Supply Agency, Major Areas of Effort or Inquiry, Fiscal Year 1966, p. 11.

[2]U.S., Department of Defense, Defense Supply Agency (DSA), Directive Number 5105.22.

portion of the total defense wholesale inventory investment outside of integrated management for other than the procurement function. Conversely, the placing of tidewater inventories under the complete ownership and operational management of DSA would mean a deep intrusion into the Navy's organic supply system.[1]

The Navy and DSA have compromised on an arrangement which provides for the positioning of DSA financed inventories under Navy management at the two coastal specialized support depots and the Navy managed direct supply support points. This somewhat complicated arrangement requires that the Navy activities involved must operate as parts of two dissimilar systems. The arrangement has proved workable to date. However, there is a justifiable fear that under extreme emergency conditions the arrangement could become unsatisfactory in that both the Navy and DSA would depend on the ready availability of the same stocks for issue to their respective customers.[2]

Because of the restriction of the DSA commodity management mission to the continental United States, supply systems in overseas areas are treated as part of the organic retail systems of the military departments. As a result, three widely divergent supply systems, which draw upon the same DSA integrated wholesale supply source, render immediate support to unified commands. These three operationally sensitive supply

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[1]U.S., Defense Supply Agency, Major Areas of Effort or Inquiry, Fiscal Year 1966, p. 11.

[2]Ibid., pp. 12-13.

systems range from support of Army units by major depots in the principal overseas area to the Air Force system under which overseas units requisition directly on Defense Supply Centers for direct shipment to overseas bases.[1]

A DSA interface study completed in 1966 suggested the positioning of selected DSA stocks in overseas areas under a specialized support depot arrangement as one means of assuring a single immediate source of supply for all users. However, without a drastic change in the existing organizational arrangement, this would add yet another different supply system serving overseas forces. One possibility which deserves much further study before conclusions can be reached is a specialized support depot arrangement which would position DSA owned materiel under the control of overseas unified commanders. Such an assignment of retail supply management responsibilities to unified commanders would be in consonance with military command structures but would require a major overhaul of overseas support concepts and organizational arrangements.[2]

The Defense Utilization Program

Inherent in any well organized activity or business, and particularly so in an operation as large as the Department of Defense, is the need for optimum utilization of assets.

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[1] Ibid., p. 13.

[2] Ibid., pp. 13-14.

The objective of the Defense Utilization Program, administered by DSA, is:

> . . .transfer of releasable assets between the military services and the reutilization of excess materiel to meet new requirements and thereby reduce expenditures for new procurement and repair.[1]

This integrated program, which is an outgrowth of several earlier somewhat piecemeal efforts, is conducted at the Defense Logistics Services Center. The program is highly automated and there is a continuing effort to update screening procedures by taking advantage of the most modern data processing techniques available. Basically, the centralized screening system involves the input of information from service inventory control points on current and future requirements and releasable assets, including both supply system releasable stocks and declared excess reported by using activities. These data are compared through the common language of the Federal Catalog System. Interchangeability and substitutability information is used to enhance the possibility of filling a requirement by offering possible interchangeable or substitutable materiel. The latest modification of the system provides positive advice to the inventory control points on transactions in the screening system.[2]

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[1]U.S., Department of Defense, Supply Management Reference Book, p. 44.

[2]Ibid.

U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, pp. 321-22.

The utilization program, in conjunction with the defensewide visibility of requirements and wholesale assets provided under the integrated management concept for DSA materiel, has greatly increased materiel utilization throughout the Department of Defense. Intraservice and interservice redistribution and utilization of materiel resulting directly from the Defense Utilization Program runs into the billions of dollars annually.[1]

Relationships with the General Services Administration

Finally, the growing role of the General Services Administration (GSA) as an integrated materiel manager for the Department of Defense, and that agency's relationship with DSA deserve mention.

Prior to the establishment of DSA, the Department of Defense had reached agreement with GSA whereby that agency purchased various commodities such as office furniture, military family housing and quarters furniture and furnishings, and similar common use items for the military services. In addition, military service inventory control points referred a very limited number of items to GSA for supply support.[2]

Since DSA became the focal point for the establishment

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, pp. 321-23.

[2]Ibid., p. 234.

of support agreements with GSA and became responsible for monitoring the effectiveness of GSA's support, considerable progress has been made toward better utilization of GSA's services by the Department of Defense.

GSA has developed a systems capability to interface with defense activities in the use of standardized requisitioning procedures (MILSTRIP) and the uniform military materiel issue priority system (UMMIPS) as well as with other systems developments involving communications and data flow.[1]

As of the end of fiscal year 1968, sixty five federal supply classes comprising some 68,000 items had been transferred from the Department of Defense to GSA for integrated materiel management. The Defense Department is currently GSA's biggest customer. GSA sales to defense components in 1968 amounted to 377.6 million dollars as compared to total sales of 513 million dollars.[2]

Conversely, in an effort to minimize duplication of effort between the two agencies, DSA has agreed to furnish support to all federal agencies in several commodity areas including fuel, electronics materiel and some clothing and textile items.[3]

Increased cooperation between the two agencies can be expected with respect to the establishment of support agreements

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[1] Ibid., p. 236.

[2] Ibid., p. 235.

[3] Ibid.

and supply management relationships under a continuing joint materiel management review program which was established in 1964.

CHAPTER V

EXPERIENCE DURING THE VIETNAM WAR AND IMPLICATIONS FOR THE FUTURE

There is general agreement among observers of the Vietnam War that support of United States military forces in Southeast Asia has far surpassed the standards set in any previous armed conflicts. Since it has been estimated that approximately 50 per cent of the items used by American forces in Vietnam are managed and supplied by DSA,[1] this experience provides the best vehicle to date for evaluating the effectiveness of DSA under emergency conditions.

Unfortunately, this analysis will be somewhat limited since a comprehensive review of logistics support for forces in Southeast Asia has not yet been completed. However, such a review has been initiated recently by the Joint Logistics Review Group, which was created expressly for the purpose of reviewing the Vietnam experience with a view toward using this experience as a basis for planning for future emergencies. This is a prestigious study group, headed by General Frank Besson, Jr., U. S. Army, former Commanding General of the Army Materiel Command. Each of the military services and DSA are represented on

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[1]U.S., Defense Supply Agency, Letter, DSAH-LM, "Lessons Learned from Vietnam Buildup," August 22, 1968.

the group by personnel at the flag or general officer level.

Notwithstanding the limitations imposed due to the non-availability of this comprehensive study, it is appropriate that a review be undertaken of certain key indicators of DSA's effectiveness and performance during the Vietnam War.

The principal statistical indicator of the effectiveness of DSA's support is stock availability, which is defined as the percentage of requisitions received which can be filled from available stock. Prior to the acceleration of combat operations in 1965 and 1966, DSA's stock availability was averaging in excess of 91 per cent. Beginning late in fiscal year 1965, the buildup of forces in Southeast Asia placed a rapidly escalating demand on the system, resulting in a drawdown of inventory at a much more rapid rate than it could be replaced from production. As a result, overall stock availability declined to a low of 87 per cent in fiscal year 1966 and to an all time low point of 83 per cent in October 1966.[1]

Although these average percentages of availability are useful indicators, they do not reveal performance by commodities. The most troublesome DSA commodity during the early days of the buildup was clothing. For example, during the alltime low month, October 1966, stock availability for clothing fell to a low of 59 per cent.[2]

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, p. 217.

[2]Ibid.

By June, 1966, overall stock availability returned to 91 per cent and has remained at about that level since that date. By the end of fiscal year 1968, problems with clothing had long since been resolved and construction materiel, which averaged 76 per cent availability, had become the most troublesome commodity.[1]

In order to cope with the rapidly increasing demand resulting from the troop buildup, DSA undertook a greatly expanded procurement program and amended certain management strategies.

The most noteworthy change in management techniques was the establishment of an ad hoc clothing problem working group in Headquarters, DSA to give intensive management attention to the clothing problem. This group, which was established in January 1966 and which remained in existence for almost two years, identified the most critical items and, in effect, managed priority actions to overcome the problems. These actions included close liaison with the military services with a view toward reducing issues to troops, reducing retail stock levels, the return of used clothing for renovation and reissue, and the temporary relaxation of clothing specifications in order to attain increased production. Efforts were also made to obtain earlier and more accurate planning information with respect to changes in troop strengths and other requirements data.[2]

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[1] Ibid.

[2] U.S., Defense Supply Agency, "Summary of Actions Associated With the Military Services Clothing Shortages."

Internally within DSA, efforts were exerted to obtain both increased and accelerated production to meet the rising demand. Since the troop buildup occurred during a period when the clothing industry was enjoying near capacity business based on a high level of consumer demand, it was necessary for DSA to resort to the use of "mandatory acceptance orders" under the authority of the Defense Production Act of 1950, as amended, in order to obtain required levels of production.[1]

These and other efforts overcame the clothing problem and relative normalcy was attained by late 1967. Among the primary causes of DSA's inability to meet the rising demand were inadequate safety levels and inadequate mobilization reserve stocks. These inadequacies were, in turn, due primarily to funding restrictions in the years preceding the Vietnam War.[2]

Turning to construction materiel, a more chronic problem area, repair parts for construction equipment, materiel handling equipment and power generating equipment have continued to be DSA's most difficult support problem over the long run. The basic causes of these problems are somewhat different than with clothing. With little or no usage data on these repair parts for obsolescent equipment and for equipment being used

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[1]Diane Steed, "Use of Rated Orders" (unpublished report, Defense Supply Agency, Alexandria, Virginia, 1967).

[2]U.S., Defense Supply Agency, "Summary of Actions Associated With the Military Services Clothing Shortages."

under conditions in Vietnam which had not been experienced before, DSA had never stocked many of the repair parts required to keep these equipments in operation. Procurement of such parts requires long lead times and, in many cases, the equipment and required parts have long since been out of production, thereby compounding the problem.[1]

Early in 1967, the General Accounting Office completed a broad survey of the responsivenss of Department of Defense supply systems in meeting operational needs during the Vietnam War. Of nine major observations made by the General Accounting Office, two are of interest with respect to DSA's support of military forces in Vietnam:

> 1. The stock fund method of financing the acquisition of supplies by using units is not sufficiently responsive to the needs of rapidly increasing demands. Accordingly, we believe that certain modifications to the stock fund system are necessary with respect to their application to combat support units.
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> 2. Information regarding increased force levels and flying hour programs need to be provided to responsible inventory management officials more promptly in order to effect timely requirement determinations and procurement actions.[2]

Notwithstanding these and other problem areas, DSA support is viewed by field commanders in Southeast Asia as

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, p. 218.

[2]U.S., Congress, Joint Economic Committee, Economy in Government, Hearings, before the Joint Economic Committee, Congress of the United States, 90th Cong., 1st sess., 1967, p. 5.

ranging from good to excellent. Early in 1968, Lieutenant General Earl Hedlund, U. S. Air Force, Director of DSA, returned from an extensive trip to the Pacific area where he talked with field commanders and their top logisticians to develop a personal evaluation of the effectiveness and responseiveness of DSA's support. In the case of food, medical items, fuel and electronics materiel, support was described as excellent. Support of clothing, construction supplies, industrial materiel and general supplies was considered to be good.[1]

One can only speculate with respect to a comparison of DSA's effectiveness and responsiveness with that which would have existed under previous supply systems or some yet untried system. However, it seems reasonable to conclude that DSA has provided adequate support and that the agency has, in fact, come of age with the experience gained during the Vietnam War.

In capitalizing on this experience, DSA has compiled a list of "lessons learned" during the Vietnam War for consideration and further study by the Joint Logistics Review Group. Included in this list is a recognition of problems caused by funding restraints; the need for earlier and closer participation in the military planning process to gain better knowledge of requirements; and the need for better system visibility of stocks,

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[1]U.S., Congress, House, Committee on Government Operations, Military Supply Systems, Hearings, p. 218.

including retail system stocks, to assist in making buy decisions, redistribution decisions, and to avoid excess stocks.[1]

Implications for the Future

There is no longer any serious speculation concerning the possibility that the responsibility for management of common supplies and services will be decentralized to the military services again. Integrated materiel management is here to stay. An evaluation of the experience gained during the Vietnam War strongly suggests that DSA is here to stay. Its success in wholesale logistics management suggests a continuing trend toward integrated management and centralization of logistics functions.

With respect to the range of items which may be assigned to DSA in the future, experience with the logistic management structures developed within the military departments suggests that there are three major alternative courses which integrated management might take:

> 1. The integrated manager might become the follow-on manager for all supplies and equipment after the research and development process is complete, thus, eventually, encompassing virtually all supplies and materiel in the Department of Defense at some stage of their life cycles.
> 2. The integrated manager might be restricted to "less technical items" including major end items and reparables in this category, with the "more technical items" remaining under unilateral Departmental management or some form of Departmental single management.

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[1]U.S., Defense Supply Agency, "Lessons Learned from Vietnam Buildup."

> 3. The integrated manager might be restricted to the management of secondary/consumable items, thus encompassing the great majority of line items managed within the Department of Defense, although accounting for a relatively small portion of the total value of inventories and procurement.[1]

The other area of possible expansion of integrated materiel management is the functional span of the commodity management mission.

DSA does not have the responsibility for computation of mobilization and special program requirements, since this is considered to be an essential responsibility of the military departments. For the same reason, DSA has little or no responsibility for functions which would require a significant in-house technical capability such as research and development, specification development, provisioning, engineering support, and the performance of depot maintenance.[2]

Although significant changes in these areas would require amendment of existing management concepts, none of these changes would be so drastic as was the shift to integrated materiel management itself.

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[1] U.S., Defense Supply Agency, Major Areas of Effort or Inquiry, Fiscal Year 1966, pp. 6-7.

[2] Ibid., p. 8.

CHAPTER VI

CONCLUSIONS

Although there was early recognition of the need for improving the arrangement for provision of common supplies and services to the military departments, the search for the optimal arrangement has been long, tedious and controversial.

Integration of materiel management was made possible by centralization of the defense management function resulting from the National Security Act of 1947 and subsequent legislation. However, it is doubtful that a great deal of progress toward integration would have taken place without the constant congressional pressure which nudged the Department of Defense into action.

The single manager plan, although a giant step in the direction of integrated management, was essentially a compromise measure. This approach may have constituted the blueprint for future integration had it not been for the lack of coordination and standardization as a result of differing policies and procedures adopted by the single manager operating agencies.

Upon assuming his duties as Secretary of Defense, Robert McNamara had decided on the single agency approach to integrated materiel management. The only question that remained was what form the agency should take and what organizational

arrangement would be best. The decision to establish a separate agency which reports directly to the Secretary of Defense was a sound one. It affords the Director of DSA direct access to top management. There is no doubt that this arrangement has been a factor in DSA's success.

DSA's ability to quickly organize and show immediate progress was greatly enhanced by the fact that the agency took command of "going concern" activities. Thus the agency was able to concentrate on refinement of management practices and standardization of systems and procedures rather than organizing an entirely new agency.

The establishment of DSA impacted heavily on the defense logistics environment. Although major changes were required in military supply systems, the integrity of these departmental supply systems has been maintained.

Even though the Vietnam experience revealed an apparent need for DSA to gain better visibility of military requirements by more active liaison with the military planning process, the agency has established effective working relationships with appropriate levels in the military departments as well as with the Joint Chiefs of Staff.

DSA has proven to be a viable organization, adapting readily to changing mission assignments and responsibilities. Important organization changes and consolidation of functions have been undertaken in an effort to reduce operating costs. Substantial savings in both inventory investment and operating costs have been realized concurrently with a continuation of

effective support of the military services.

The assumption of the responsibility for overseas support of decentralized and non-cataloged items for the Army and Air Force is considered to be incongruous with the concept of integrated materiel management and with the basic mission of DSA.

The division of responsibility between DSA and the military services for items assigned to integrated materiel management is relatively clear and is considered to be based on sound concepts. There is, however, a "gray area" between the military services' technical responsibilities and DSA's supply management responsibilities. The trend appears to be toward increased assumption of technical responsibilities by DSA.

The supply management strategies used by DSA are conceptually sound. The two primary problem areas which prevent optimum use of these strategies are funding restrictions imposed by higher authority and lack of complete visibility of requirements and retail level assets.

The DSA distribution system is efficient and effective. Due to the Navy's unique support arrangement whereby wholesale and retail stocks are merged in coastal supply centers and depots, there is no clear line of demarcation with respect to DSA's wholesale stocks and the Navy's retail stocks. This arrangement, although cumbersome, has proven to be workable under conditions to date. A proposal to position DSA wholesale stocks in overseas locations under the control of unified commanders

would require a complete rethinking of organizational structures and support concepts.

Working relationships with the General Services Administration have improved. GSA has assumed increased responsibilities with respect to support of military forces. With this new atmosphere of cooperation, GSA can be expected to assume an increasing role in integrated materiel management for the Department of Defense.

The Vietnam War has provided the first real test of DSA's ability to support military forces under emergency conditions. There have been problems, but one must conclude that the agency has successfully met the challenge. Although comparisons with what might have been under some other system are impossible, there is no reason to believe that another arrangement for the provision of common supplies would have been more successful.

The principle requisites for effective materiel management have been met by DSA. The concept of centralization of management of common supplies and services is sound.

There is every reason to believe that DSA provides the Department of Defense with a long-term blueprint for the integration of common supply and service activities. The only question which remains is what form increased integration will take. The trend appears to be toward an increase of the range of items assigned to integrated materiel management as well as an increase in the functional span of the commodity management mission.

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